

**Amendments to the Specification**

Applicant notes that the some of the current paragraph numbers, reflected in the published application, are no longer the same as the paragraph numbers in the original specification. The paragraph immediately below the heading "Brief Summary of the Invention" was not originally numbered, but has now been numbered 0009, and thus, all subsequent paragraphs have been renumbered. The below remarks reference the current paragraph numbers, as shown in the published application, with the old paragraph numbers noted in parentheses.

*Please amend Paragraph 0015 (0014 in the original specification) as follows:*

FIG. 5 6 shows an example of endoscopic surgical approach planning relative to a reconstructed model of a coronal imaging plane according to a method of the present invention.

*Please amend Paragraph 0016 (0015 in the original specification) as follows:*

FIG. 6 7 illustrates a method of enhanced endoscopic positioning by displaying the endoscopic viewable area according to the present invention.

*Please amend Paragraph 0026 (0025 in the original specification) as follows:*

It is possible to establish the global position of an endoscope with respect to a set of volumetric scan data without the use of external sensors, such as the cameras 64 (FIG.

3). This is illustrated in FIGS. 8A, 8B, 8C, and 8D. An endoscope 10 inserted into an anatomical cavity 50 searches for a landmark 120 automatically or controlled by the user. Once a landmark 120 has been located, the image data is matched with a stored electronic representation 122 of the landmark in question. Matching is accomplished by standard pattern matching or machine vision algorithms. Once a satisfactory match has been achieved, the location of the endoscopic view as seen on the reconstructed model 68 of the cavity 50 is known, as illustrated in FIG. 8B. The relative position of the endoscope 10 and the cavity 50 can then be determined from the endoscope configuration data, as shown in FIG. 8C by a graphical representation of the endoscope × 73 and the model 68. For greater accuracy, four landmarks 122, 124, 126, 128 (FIG. 8D) are needed for the endoscope 10 to establish its global position. By matching four landmarks on the volumetric model 68 with the actual endoscopic images, the relative endoscope configurations for each of the four viewing directions 130, 132, 134, and 136 can be used to compute the spatial position of the endoscope 10 relative to the anatomy 50. Fewer landmarks are needed in certain cases. More landmarks provide increasingly better position accuracy. In this way the endoscope effectively locates itself in a surgical environment by collecting local visual information that can be correlated with preexisting data about the surroundings, much like a person would orient herself in a city by identifying known buildings or landmarks. Thus, a global perspective of the endoscope can be constructed entirely without external sensors or instrumentation.